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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>09 October 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-52</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-9,17,19,20 and 22-52</u> is/are rejected.

7)☒ Claim(s) <u>10-16,18 and 21</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 February 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413)
                                                Paper No(s)/Mail Date. _____ .

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application

3)☐ Information Disclosure Statement(s) (PTO/SB/08)   6)☐ Other: _____.
    Paper No(s)/Mail Date _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed October 9, 2007 have been fully considered but they are not persuasive.

The Applicant argues that Dimitrova et al. fails to disclose a blank segment detector or the identification of a blank segment that does not correspond to recorded visual content. The Examiner respectfully disagrees. Dimitrova et al. discloses in col. 18, lines 36-52 detecting a sequence of blank frames, thereby detecting a blank segment. Dimitrova et al. further goes on to state the sequence must be at least 10-30 frames long. Therefore, Dimitrova et al. meets the claim limitations and therefore the rejection is maintained.

The Applicant argues on that Dimitrova et al. fails to disclose describing a blank frame detector which makes use of color information for individual pixels to determine whether a frame is a blank frame or a snow-static frame. The Examiner respectfully disagrees. Dimitrova et al. discloses in col. 6, lines 40-52 disclosing that if 90% of the blocks or 1782 blocks in the same interval the image is considered to be unicolor. Furthermore, a snow-static frame would be considered to be unicolor and therefore would fall under the same category as the blank frame. Therefore, Dimitrova et al. meets the claim limitations and therefore the rejection is maintained.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-9, 17, 19, 20, 22-52 are rejected under 35 U.S.C. 102(e) as being

anticipated by Dimitrova et al. (U.S. Patent 6,100,941).

        Regarding claim 1, Dimitrova et al. discloses an apparatus for identifying a

blank segment in a set of visual recording data, comprising: a plurality of blank

frame detectors, each blank frame detector adapted to evaluate a frame of visual

recording data to determine whether the frame of visual recording data is a blank

frame (Figs. 2 and 5; col. 5, lines 47-65); and a blank segment detector, the

blank segment detector adapted to receive input from the plurality of blank frame

detectors regarding a plurality of frames of visual recording data to evaluate a

characteristic of a plurality of frames of visual recording data to determine

whether the plurality of frames of visual recording data is a blank segment that

does not correspond to recorded visual content (col. 2, line 65 – col. 3, line 9; col.

13, lines 51-67; col.18, lines 36-52).

        Regarding claim 2, Dimitrova et al. discloses all the limitations as

previously discussed with respect to claim 1 including that the plurality of blank

frame detectors comprise first and second blank frame detectors (Fig. 5); the first blank frame detector is adapted to evaluate a frame of visual recording data to determine whether the frame of visual recording data is a blank frame of a first type; and the second blank frame detector is adapted to evaluate a frame of visual recording data to determine whether the frame of visual recording data is a blank frame of a second type, the second type being different from the first type (Figs. 2 and 5; col. 5, lines 47-65).

Regarding claims **3-6**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claim 1 including that at least one of the plurality of blank frame detectors is adapted to detect frames of visual recording data that represent an image that is all or nearly all one color, all or nearly blue or purple, all or nearly all silver, or all or nearly all black (Fig. 6A; col. 2, line 65 – col. 3, line 9).

Regarding claim **7**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claim 1 as well as the apparatus further comprising means for evaluating a determination that a frame of visual recording data is a blank frame to either confirm or reject the determination (Figs. 2 and 5; col. 5, line 66 – col. 6, line 10).

Regarding claim **8**, Dimitrova et al. discloses an apparatus for identifying a blank segment in a set of visual recording data, comprising: a blank frame detector, the blank frame detector adapted to evaluate a frame of visual recording data to determine whether the frame of visual recording data is a blank

frame, and, if so, whether the blank frame is of a first type or of a second type

that is different from the first type (Figs. 2 and 5; col. 5, lines 47-65); and a blank

segment detector, the blank segment detector adapted to receive input from the

blank frame detector regarding a plurality of frames of visual recording data and

to evaluate a characteristic of a plurality of frames of visual recording data to

determine whether the plurality of frames of visual recording data is a blank

segment that does not correspond to recorded visual content (col. 2, line 65 –

col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **9**, Dimitrova et al. discloses an apparatus for identifying a

blank segment in a set of visual recording data, comprising: a blank frame

detector, the blank frame detector adapted to evaluate a frame of visual

recording data to determine whether the frame of visual recording data is a blank

frame representing an image that is all or nearly all one color (Figs. 2 and 5; col.

5, lines 47-65), wherein the blank frame detector further comprises: means for

determining if, for each color component, the numerical value of a specified

number of the pixels of the frame is within a specified magnitude of the average

numerical value of that color component for all of the pixels of the frame; and

means for determining if the average numerical value of each color component

for all of the pixels of the frame is within a specified range and/or has a specified

relationship with the average numerical value of one or more other color

components, wherein: if, for each color component, the numerical value of the

specified number of the pixels of the frame is within the specified magnitude of

the average numerical value of that color component for all of the pixels of the

frame, and if the average numerical value of each color component for all of the

pixels of the frame is within a specified range and/or has a specified relationship

with the average numerical value of one or more other color components, then

the frame is a blank frame (Fig. 6A; col. 6, lines 40-52); and a blank segment

detector, the blank segment detector adapted to receive input from the blank

frame detector regarding a plurality of frames of visual recording data and to

evaluate a characteristic of the plurality of frames of visual recording data to

determine whether the plurality of frames of visual recording data is a blank

segment that does not correspond to recorded visual content (col. 2, line 65 –

col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **17**, Dimitrova et al. discloses an apparatus for identifying

a blank segment in a set of visual recording data, comprising: a blank frame

detector, the blank frame detector adapted to evaluate a frame of visual

recording data to determine whether the frame of visual recording data is a blank

frame (Figs. 2 and 5; col. 5, lines 47-65), wherein the blank frame detector further

comprises: means for determining if a specified maximum variation from pure

gray at each pixel is less than a specified magnitude; means for determining if

the average numerical value of each color component for all of the pixels of the

frame is within a specified range and/or has a specified relationship with the

average numerical value of one or more other color components; and means for

determining if the vertical and horizontal correlation coefficients are within

corresponding specified ranges and/or have a specified relationship with one

another, wherein: if the specified maximum variation from pure gray at each pixel

is less than a specified magnitude, the average numerical value of each color

component for all of the pixels of the frame is within a specified range and/or has

a specified relationship with the average numerical value of one or more other

color components, and the vertical and horizontal correlation coefficients are

within corresponding specified ranges and/or have a specified relationship with

one another, then the frame is a blank frame (Figs. 6A and 6B; col. 6, lines 40-

52); and a blank segment detector, the blank segment detector adapted to

receive input from the blank frame detector regarding a plurality of frames of

visual recording data and to evaluate a characteristic of the plurality of frames of

visual recording data to determine whether the plurality of frames of visual

recording data is a blank segment that does not correspond to recorded visual

content (col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **19**, Dimitrova et al. discloses an apparatus for identifying

a blank segment in a set of visual recording data, comprising: a blank frame

detector, the blank frame detector adapted to evaluate a frame of visual

recording data to determine whether the frame of visual recording data is a snow-

static frame (Figs. 2 and 5; col. 5, lines 47-65); a blank segment detector, the

blank segment detector adapted to receive input from the blank frame detector

regarding a plurality of frames of visual recording data and to evaluate a

characteristic of the plurality of frames of visual recording data to determine

whether the plurality of frames of visual recording data is a blank segment that does not correspond to recorded visual content (col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52); and means for evaluating, when a frame is determined to be a snow-static frame, the temporal correlation coefficient over a specified window of frames of visual recording data that includes the snow-static frame to either confirm or reject the determination that the frame is a snow static frame (Fig. 5 – step 551 – a snow-static frame is unicolor and therefore can be considered a black frame).

Regarding claim **20**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claim 19 including that the means for evaluating the temporal correlation coefficient further comprises: means for determining if all of the frames in the window are snow-static frames; means for determining if at least one of the frames in the window has a temporal correlation coefficient with greater than a first specified magnitude; and means for determining if at least one of the frames in the window has a temporal correlation coefficient with less than a second specified magnitude (col. 9, line 42 – col. 13, line 42).

Regarding claim **22**, Dimitrova et al. discloses an apparatus for identifying a blank segment in a set of visual recording data, comprising: a blank frame detector, the blank frame detector adapted to evaluate a frame of visual recording data to determine whether the frame of visual recording data is a blank frame (Figs. 2 and 5; col. 5, lines 47-65); and a plurality of blank segment

detectors, each blank segment detector adapted to receive input from the blank

frame detector regarding a plurality of frames of visual recording data and to

evaluate a characteristic of the plurality of frames of visual recording data to

determine whether the plurality of frames of visual recording data is a blank

segment that does not correspond to recorded visual content (col. 2, line 65 –

col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **23**, Dimitrova et al. discloses all the limitations as

previously discussed with respect to claim 22 including that the plurality of blank

segment detectors comprise first and second blank segment detectors; the first

blank segment detector is adapted to detect blank segments including blank

frames of a first type; and the second blank segment detector is adapted to

detect blank segments including blank frames of a second type, the second type

being different from the first type (Figs. 2 and 5; col. 5, lines 47-65; col. 2, line 65

– col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **24**, Dimitrova et al. discloses an apparatus for identifying

a blank segment in a set of visual recording data, comprising: a blank frame

detector, the blank frame detector adapted to evaluate a frame of visual

recording data to determine whether the frame of visual recording data is a blank

frame (Figs. 2 and 5; col. 5, lines 47-65); and a blank segment detector, the

blank segment detector adapted to receive input from the blank frame detector

regarding a plurality of frames of visual recording data and to evaluate a

characteristic of a plurality of frames of visual recording data to determine

whether the plurality of frames of visual recording data is a blank segment that

does not correspond to recorded visual content and that includes one or more

blank frames of a first type and one or more blank frames of a second type that is

different from the first type (Figs. 2 and 5; col. 5, lines 47-65; col. 2, line 65 – col.

3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **25**, Dimitrova et al. discloses all the limitations as

previously discussed with respect to claim 24 including that the blank segment

detector is adapted to detect a first type of blank segment including blank frames

of a first type, or a second type of blank segment including blank frames of a

second type that is different from the first type of blank frames (Figs. 2 and 5; col.

5, lines 47-65; col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-

52).

Regarding claim **26**, Dimitrova et al. discloses an apparatus for identifying

a blank segment in a set of visual recording data, comprising: a blank frame

detector, the blank frame detector adapted to evaluate a frame of visual

recording data to determine whether the frame of visual recording data is a blank

frame (Figs. 2 and 5; col. 5, lines 47-65); and a blank segment detector, the

blank segment detector adapted to receive input from the blank frame detector

regarding a plurality of frames of visual recording data and to evaluate a

characteristic of a plurality of frames of visual recording data to determine

whether the plurality of frames of visual recording data is a blank segment that

does not correspond to recorded visual content that is all or nearly all one color

(Figs. 2, 5, and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claims **27-29**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claim 26 wherein the blank segment detector is adapted to detect blank segments including blank frames that represent an image that is all or nearly all blue or purple, all or nearly all silver, or all or nearly all black (Figs. 2, 5, and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **30**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claim 26 including that the blank segment detector further comprises means for determining if there are a specified number of frames in a sequence of frames that have been determined to be blank frames of the same color, wherein if there are a specified number of frames in the sequence of frames that have been determined to be blank frames of the same color, then the segment is a blank segment (Figs. 2, 5, and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **31**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claims 26 and 30 including that the specified number of frames is 95% of the frames in the sequence of frames after the first 6 frames in the sequence of frames (Figs. 2, 5, and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **32**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claims 26 and 30 including that the blank segment detector further comprises means for determining if the blank frames of the same~ color in the sequence of frames differ in color by no more than a specified amount, wherein if there are a specified number of frames in the sequence of frames that have been determined to be blank frames of the same color and the blank frames of the same color in the sequence of frames differ in color by no more than a specified amount, then the segment is a blank segment (Figs. 2, 5, and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **33**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claims 26, 30, and 32 including that the specified amount is a variance of the average color of the frames of the same color of less than 10 (Figs. 2, 5, and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **34**, Dimitrova et al. discloses an apparatus for identifying a blank segment in a set of visual recording data, comprising: a blank frame detector, the blank frame detector adapted to evaluate a frame of visual recording data to determine whether the frame of visual recording data is a snow-static frame (Figs. 2 and 5; col. 5, lines 47-65); and a blank segment detector, the blank segment detector adapted to receive input from the blank frame detector regarding a plurality of frames of visual recording data and to evaluate a

characteristic of the plurality of frames of visual recording data to determine

whether the plurality of frames of visual recording data is a blank segment that

does not correspond to record visual content that that is all or nearly all snow-

static (Figs. 2, 5 – step "553", and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3,

line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **35**, Dimitrova et al. discloses all the limitations as previously

discussed with respect to claim 26 including that the blank segment detector

further comprises means for determining if there are a specified number of

frames in a sequence of frames that have been determined to be snow-static

frames, wherein if there are a specified number of frames in the sequence of

frames that have been determined to be snow-static frames, then the segment is

a blank segment (Figs. 2, 5 – step "553", and 6A; col. 5, lines 47-65; col. 2, line

65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **36**, Dimitrova et al. discloses all the limitations as

previously discussed with respect to claims 26 and 30 including that the specified

number of frames is 95% of the frames in the sequence of frames after the first 6

frames in the sequence of frames (Figs. 2, 5, and 6A; col. 5, lines 47-65; col. 2,

line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **37**, Dimitrova et al. discloses all the limitations as

previously discussed with respect to claims 36 including the blank frame

detector is adapted to evaluate a frame of visual recording data to determine

whether the frame of visual recording data is a black frame; and that the blank

segment detector further comprises: means for determining if a specified number

of frames in the sequence of frames have been identified either as black screen

frames or snow-static frames; means for determining if the black screen frames

in the sequence of frames differ in color by no more than a specified amount,

wherein: if there are a specified number of frames in a sequence of frames that

have been determined to be snow-static frames, a specified number of frames in

the sequence of frames have been identified either as black screen frames or

snow-static frames, and the black screen frames in the sequence of frames differ

in color by no more than a specified amount, then the segment is a blank

segment (Figs. 2, 5, and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3, line 9; col.

13, lines 51-67; col. 18, lines 36-52).

Regarding claim **38**, Dimitrova et al. discloses all the limitations as

previously discussed with respect to claims 36 and 37 including that the specified

number of snow-static frames in the sequence of frames is 5; the specified

number of frames is 95% of the frames in the sequence of frames after the first 6

frames of the sequence of frames; and the specified amount is a variance of the

average color of the black frames of less than 10 (Figs. 2, 5, and 6A; col. 5, lines

47-65; col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67 – detecting frames in real

time at 30 frames/sec, therefore they are detecting 30 frames/sec corresponding

to a segment).

Regarding claim **39**, Dimitrova et al. discloses an apparatus for identifying

a blank segment in a set of visual recording data, comprising: a blank frame

detector, the blank frame detector adapted to evaluate a frame of visual

recording data to determine whether the frame of visual recording data is a blank

frame (Figs. 2 and 5; col. 5, lines 47-65); and a blank segment detector, the

blank segment detector adapted to receive input from the blank frame detector

regarding a plurality of frames of visual recording data and to evaluate a

characteristic of the plurality of frames of visual recording data to determine

whether the plurality of frames of visual recording data is a blank segment that

does not correspond to recorded visual content, wherein: the blank frame and

blank segment determinations are made for successive frames of visual

recording data as the frames of visual recording data are acquired or as the

frames of visual recording data are being processed for another purpose (Figs. 2,

5 – step "553", and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3, line 9; col. 13,

lines 51-67; col. 18, lines 36-52).

Regarding claim **40**, Dimitrova et al. discloses all the limitations as

previously discussed with respect to claim 39 as well as further comprising

means for communicating a categorization of a current segment to another

process operating on the set of visual recording data (col. 15, line 26 – col. 16,

line 46 - commercial detection).

Regarding claim **41**, Dimitrova et al. discloses all the limitations as

previously discussed with respect to claims 39 and 40 including that the set of

visual recording data is initially in an analog form and the other process is a

digitization process (col. 15, line 26 – col. 16, line 46 - commercial detection).

Regarding claim **42**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claims 39-41 including that the means for communicating a current segment categorization further comprises means for communicating the duration of a current blank segment to the digitization process; and the digitization process can be terminated if the duration of the current blank segment exceeds a specified duration (col. 15, line 26 – col. 16, line 46 - commercial detection).

Regarding claim **43**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claims 39 and 40 including that the means for communicating a current segment categorization further comprises: means for identifying the beginning of a first content segment in the set of visual recording data; and means for communicating the identification of the beginning of the first content segment to the other process operating on the set of visual recording data (col. 15, line 26 – col. 16, line 46 - commercial detection).

Regarding claim **44**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claims 39, 40, and 43 including that the other process is a process for recording the set of visual recording data onto a data storage medium; and visual recording data is not recorded onto the data storage medium until the identification of the beginning of the first content segment is communicated to the recording process (col. 15, line 26 – col. 16, line 46 - commercial detection).

Regarding claim **45**, Dimitrova et al. discloses an apparatus for identifying a blank segment in a set of visual recording data, comprising: a blank frame detector, the blank frame detector adapted to evaluate a frame of visual recording data to determine whether the frame of visual recording data is a blank frame (Figs. 2 and 5; col. 5, lines 47-65); a blank segment detector, the blank segment detector adapted to receive input from the blank frame detector regarding a plurality of frames of visual recording data and to evaluate a characteristic of the plurality of frames of visual recording data to determine whether the plurality of frames of visual recording data is a blank segment that does not correspond to recorded visual content; and means for using the detection of one or more blank segments to identify one or more segment boundaries in the set of visual recording data, each segment boundary delineating a transition from a segment of one type to a segment of another type (Figs. 2, 5 – step "553", and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **46**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claim 45 as well as the apparatus further comprising: means for identifying a segment boundary at the beginning of a blank segment; and means for marking the identified segment boundary to cause the blank segment following the identified segment boundary to be excluded from subsequent interaction with the set of visual recording data (col. 15, line 26 – col. 16, line 46 - commercial detection).

Regarding claim **47**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claims 45 and 46 including that the set of visual recording data is used to generate a display of the corresponding recorded visual content, a display of the recorded visual content corresponding to the marked segment not being generate (col. 15, line 26 – col. 16, line 46 - commercial detection).

Regarding claim **48**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claims 45 and 46 including that the set of visual recording data is processed in a specified manner, the visual recording data in the marked segment not being processed (col. 15, line 26 – col. 16, line 46 - commercial detection).

Regarding claim **49**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claim 45 as well as the apparatus further comprising: means for identifying a segment boundary at the beginning of a blank segment; and means for deleting the visual recording data in the blank segment from the set of visual recording data (col. 15, line 26 – col. 16, line 46 - commercial detection).

Regarding claim **50**, Dimitrova et al. discloses all the limitations as previously discussed with respect to claim 45 as well as the apparatus further comprising: means for determining the duration of a blank segment; and means for identifying the end of recorded visual content in the set of visual recording data as the beginning of a blank segment having greater than a specified

duration (Figs. 2, 5 – step "553", and 6A; col. 5, lines 47-65; col. 2, line 65 – col. 3, line 9; col. 13, lines 51-67; col. 18, lines 36-52).

Regarding claim **51**, this is a method claim corresponding to the apparatus claim 8. Therefore, claim 51 is analyzed and rejected as previously discussed with respect to claim 8.

Regarding claim **52**, this is a computer readable medium claim corresponding to the apparatus claim 8. Therefore, claim 52 is analyzed and rejected as previously discussed with respect to claim 8.

Allowable Subject Matter

4.   Claims 10-16, 18, and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5.   The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to teach or fairly suggest an apparatus for identifying a blank segment in a set of visual recording data:

   a.   Wherein the numerical value of each color component of each pixel can vary between 0 and 255 inclusive; the specified number of pixels is greater than or equal to 80% of the pixels; and the specified magnitude is 8 (claim 10, claims 11-16 all depend from claim 10).

   b.   Wherein each pixel of the frame of visual recording data is represented by a red color component, a green color component and a blue color component,

each color component having a value between 0 and 255 inclusive; the maximum variation from pure gray of each color component at each pixel is less than 15; the specified range for the green color component is between 5 and 45; the absolute value of the difference between the magnitude of the red color component and the magnitude of the green color component is less than 5; the absolute value of the difference between the magnitude of the green color component and the magnitude of the blue color component is less than 5; and the absolute value of the difference between the magnitude of the red color component and the magnitude of the blue color component is less than 5; the vertical correlation coefficient is less than 0.41; the horizontal correlation coefficient is less than 0.85; and the horizontal correlation coefficient is greater than twice the vertical correlation coefficient (claim 18).

c.   Wherein the first specified magnitude is 0.98; and the second specified magnitude is 0.02 (claim 21).

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Heather R. Jones whose telephone number is 571-272-

7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and

every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John Miller can be reached on 571-272-7353. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

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Heather R Jones
Examiner
Art Unit 2621

HRJ
December 22, 2007
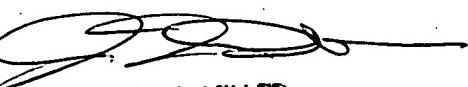
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